



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,379	02/28/2002	Akemi Hirotsunc	H&A-108	1244
7590 08/23/2007 MATTINGLY, STANGER & MALUR, P.C. Suite 370 1800 Diagonal Road Alexandria, VA 22314			EXAMINER AUGUSTIN, EVENS J	
			ART UNIT 3621	PAPER NUMBER
			MAIL DATE 08/23/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/084,379

**Applicant(s)**

HIROTSUNE ET AL.

**Examiner**

Evans Augustin

**Art Unit**

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/18/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

1. The USPTO has acknowledged the Request for Continued Examination (RCE), under 37 C.F.R. § 1.114, filed on 23 July 2007. Claims 1-6 and 8-42 are pending.

***Claim Interpretation***

2. In determining patentability of an invention over the prior art, the USPTO has considered all claimed limitations, and interpreted as broadly as their terms reasonably allow. Additionally, all words in the claims have been considered in judging the patentability of the claims against the prior art.
3. It should also be noted that, in the office action that:
  - A. Items in the rejection that are in quotation marks are claimed language/limitations.
  - B. Passages in prior art references may be mere rephrasing/rewording of claimed limitations, but the implicit/explicit meaning of the references vis-à-vis the claimed limitation remains intact.
  - C. Functional recitation(s) using the word “for” or other functional terms have been considered but given less patentable weight<sup>1</sup> because they fail to add any steps and are thereby regarded as intended use language. To be especially clear, the Examiner has considered all claim limitations. However the A recitation of the intended use of the claimed invention must result in additional steps. See *Bristol-Myers Squibb Co. v.*

---

<sup>1</sup> See *e.g. In re Gulack*, 703 F.2d 1381, 217 USPQ 401, 404 (Fed. Cir. 1983)(stating that although all limitations must be considered, not all limitations are entitled to patentable weight).

*Ben Venue Laboratories, Inc.*, 246 F.3d 1368, 1375-76, 58 USPQ2d 1508, 1513 (Fed. Cir. 2001) (Where the language in a method claim states only a purpose and intended result, the expression does not result in a manipulative difference in the steps of the claim.).

- D. Word(s) that are separated by “/” are being examined as being synonymous or equivalent.
- E. The United States Patent and Trademark Office is interpreting the claims as displaying prerecorded information in an area of optical disk and recording disk information in the prerecorded information/data. In this case, the prerecorded data is advertisement.
- F. The USPTO interprets claim limitations that contain statement(s) such as “*if, may, might, can, could, when, potentially, possibly*”, as optional language (this list of examples is not intended to be exhaustive). As matter of linguistic precision, optional claim elements do not narrow claim limitations, since they can always be omitted (*In re Johnston*, 77 USPQ2d 1788 (Fed. Circ. 2006)). They will be given less patentable weight, because language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.
- G. Independent claims are examined together, since they are not patentable distinct. If applicant expressly states on the record that two or more independent and distinct inventions are claimed in a single application, the Examiner may require the applicant to elect an invention to which the claims will be restricted.

- H. Any official notices taken by the USPTO that are not adequately traversed by applicant will be taken to be admitted prior art.
- I. The USPTO interprets common computer related words that are not lexicographically defined the word in accordance to Computer Dictionary, 3<sup>rd</sup> Edition, Microsoft Press, Redmond, WA, 1997<sup>2</sup>. The USPTO also uses published patent applications and issued patents as well, for meanings of common computer related words that are not lexicographically defined. Accordingly, Encryption is defined as : n. The process of encoding data to prevent unauthorized access, especially during transmission. Encryption is usually based on a key that is essential for decoding. The U.S. National Bureau of Standards created a complex encryption standard, Data Encryption Standard (DES), which provides almost unlimited ways to encrypt documents. See also DES.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

---

<sup>2</sup> Based upon Applicants' disclosure, the art of record, and the knowledge of one of ordinary skill in this art as determined by the factors discussed in MPEP §2141.03 (where practical), the Examiner finds that the *Microsoft Press Computer Dictionary* is an appropriate technical dictionary known to be used by one of ordinary skill in this art. See *e.g. Altiris Inc. v. Symantec Corp.*, 318 F.3d 1363, 1373, 65 USPQ2d 1865, 1872 (Fed. Cir. 2003) where the Federal Circuit used the *Microsoft Press Computer Dictionary* (3d ed.) as "a technical dictionary" to define the term "flag." See also *In re Barr*, 444 F.2d 588, 170 USPQ 330 (CCPA 1971)(noting that its appropriate to use technical dictionaries in order to ascertain the meaning of a term of art) and MPEP §2173.05(a) titled 'New Terminology.'

a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-6, 8-10, 12-33 and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueki (U.S 6, 678236), in view of Maeda et al. (US 6654547).

2. As per claims 1-6, 8-10, 12-33 and 35-42, Ueki discloses a method and an apparatus for recording information on a recording medium. In addition, this invention relates to a method and an apparatus for reproducing information from a recording medium. The invention comprises of:

- A. **The lead in area of the disk is being made a recording-limited area by error correction process on a signal read out from a recording disc, for example, a DVD-Video or a DVD-RW. In this case, the signal or data being read is copy protection data (column 10, lines 33-36, lines 44-54). However, artisans in the art would understand that the data could any data, including advertising data (Per Merriam-Webster's dictionary, data = 1: information output by a sensing device or organ that includes both useful and irrelevant or redundant information and must be processed to be meaningful 2: information in numerical form that can be digitally transmitted or processed) -- ("providing a recording limited area on a recording medium that has a recording limit and is recognized as an area in which recording of information cannot be performed")**
- B. Figure 15 shows the sequence of events in the lead area when recording is initiated. First, the data is recorded (pre-recorded), and continues until pit area where the prerecorded data is located. At that point, recording is suspended and the system changes operation from recording to playback. **At the end of the playback operation recording is**

**resumed (equivalent to canceling the recording-limited area)** (column 26, lines 48-67). Data is recorded in the lead-in area (column 11, lines 1-15) --(**" canceling the recording limit for the recording-limited area"**) --.

- C. Content to be recorded in the lead in area contains data sectors and those sectors are composed of **ID information (equivalent to address information)**, an ID-information error correction code (IED) 22, reserved data, a data region 24, and an error detection code (EDC) (column 11, lines 31-37). **Address information or allocation data is recorded** in the lead in area (column 17, lines 15-37) --(**" recording new-information in said recording-limited area after said canceling of the recording limit"**); (**"recording limit is provided by rendering a read-out of allocation information for said recording-limited area impossible, and the step of canceling the recording limit comprises a step of recording allocation information for said recording-limited area in said recording medium"**); (**"recording limit limits recording by rendering an ID error detection code of address information for said recording-limited area inconsistent with an ID corresponding to said ID error detection code, and the canceling of the recording limit is performed by rendering said ID error detection code thus made inconsistent, to be consistent with said ID"**)--
- D. The pre-recorded data, in this case, copyright information of disk, is **represented by pits** (column 9, lines 48-49). At an initial stage of a recording mode of operation of the apparatus, the **address information** is reproduced from the address pre-pits in the DVD-RW. During a later stage of the recording mode of operation, **recording positions on the DVD-RW are decided in response to the address information** (equivalent to

allocation information), and lead-in information and contents information are recorded on the decided recording positions of the DVD-RW (column 18, lines 30-36). The lead-in area has recording areas, except where the copyright information is location (column 17, lines 1-21). Inherently, since the copyright information area cannot be erased or overwritten (column 14, lines 17-20), the reading of its address information is impossible. Since no recording can be done in prerecorded area, the address information is inherently erased (can't be read) --*Claims 2-3, 9-10, 13-16*

E. Figure 15 shows the sequence of events in the lead area when recording is initiated. First, the data is recorded, and continues until pit area where the prerecorded data is located. At that point, recording is suspended and the system changes operation from recording to playback. At the end of the playback (display/readout) operation recording is resumed (equivalent to canceling the recording-limited area) (column 26, lines 48-67). Since no recording can be done in prerecorded area, the address information is inherently erased (can't be read)– ("recording limit is provided by rendering a read-out of allocation information for said recording-limited area impossible, and the step of canceling the recording limit comprises canceling the recording limit using predetermined software") --

F. First, the data is recorded (pre-recorded), and continues until pit area where the prerecorded data is located. At that point, recording is suspended and the system changes operation from recording to playback. At the end of the playback operation recording is resumed (equivalent to canceling the recording-limited area) (column 26, lines 48-67). Data is recorded in the lead-in area (column 11, lines 1-15). The playback signal



(pre-recorded information) can be displayed/readout via a **monitor device (a display)** (column 21, lines 9-10) – the aspect of issuing instructions to do the above is inherent. The above steps have to necessarily be initiated by computer instructions - ("**providing pre-recorded information**"); ("**issuing an instruction to record information to said recording medium prior to the canceling of said recording limit; and issuing an instruction for reading the pre-recorded displaying predetermined information in response to the recording instruction being issued**") --

G. The lead-in area of the disc contained **predetermined information** (column 7, lines 26-28). That **predetermined information** can be information related to the manufacture of the disc, information of a contents start position, and copyright-protection-related information (column 17, lines 5-7). **Since is that information is predetermined, one skilled in the art would be able to put any type of previously recorded information on the disk, including advertisement.** –

H. As previously shown, the pre-recorded is displayed through **error** or **defective** read out (column 10, lines 33-36, lines 44-54). The system also shows that it can correct the errors, where the data amount (the number of bits) of the recorded copyright-protection-related information is within the range of the ability of an ECC (**error correction code**) block, containing the pre-pit area, to **correct errors** (equivalent to no longer defective) (column 10, lines 33-44). -

I. Figure 15 shows the sequence of events in the lead area when recording is initiated. First, the data is recorded, and continues until pit area where the prerecorded data is located. At that point, recording is suspended and the system changes operation from recording to

playback. **At the end of the playback operation (which is the specified event), recording is resumed (equivalent to canceling the recording-limited area)** (column 26, lines 48-67) –

J. The playback signal can be displayed via a **monitor device (a display)** (column 21, lines 9-10) -

3. Ueki did not explicitly describe a method/system in which the prerecorded is an advertisement. However, Maeda et al. describes an invention that relates to DVD (Digital Versatile Disc) rental systems and methods, and more specifically, to a DVD rental system and method for recording video and sound on a DVD, and lending the DVD to a user. According to Maeda et al., the user presses a PLAY button to make an instruction for starting playback. In response, the playback/recording controller 36 instructs the DVD read part 32, the MPEG decoder 34, and the video display part 35 to execute a Commercial Message (CM) or advertisement playback process as follows. That is, the CM recorded in step S302 is read from the RAM area 1b of the DVD 1, and the decoded CM is converted into video signals for output to the television receiver (step S306). This CM playback process ends after a predetermined number of CMs, for example, six CMs (their total time is 1 and a half minutes) are played-back (figure 7, col. 12, ll. 13-23).

4. Therefore, it would have been obvious for one skilled in to provide CDs or DVDs, which has prerecorded advertisement on them. The reason for doing so would provide a DVD rental system and method that can have a user (renter) view video and sound recorded on a DVD together with CMs with high advertising effectiveness and, as a result, can sufficiently reduce a rental fee to be charged to the user (col. 2, ll.10-14).

5. Claims 11 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueki (U.S. 6, 678236), in view of Maeda et al. (US 6654547) and in further of Nishio (US 5887192).
6. As per claims 11 and 34, Ueki and Maeda et al.'s inventions have previously been disclosed.
7. Ueki and Maeda et al. did not explicitly describe a method/system in which data on the disk is encrypted.
8. However, Nishio describes an invention that teaches movie data on a CD, along with advertisement data (col. 5, ll. 40-43). According to Nishio, unit data may be each previously encrypted or compressed. If the unit data is compressed beforehand, there may be provided an expanding means for restoring the unit data by expanding the compressed unit data. If the unit data is encrypted beforehand, there may be a decrypting means for decrypting the encrypted software (col. 3, ll. 20-24).
9. Therefore, it would have been obvious for one skilled in to provide system in which data on a disk encrypted. The reason for doing so would be because encryption prevents unauthorized access to data, especially during transmission.

### ***Conclusion***

5. *Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that if the applicant is preparing to respond, to consider fully the entire references as potentially*

*teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evens Augustin whose telephone number is 571-272-6860. The examiner can normally be reached on Monday thru Friday 8 to 5 pm.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on 571-272-6779.

/Evens J. Augustin/  
Evens J. Augustin  
August 19, 2007  
Art Unit 3621